



DOCKET NO.: ISIS-1158

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re patent application of:

Nielsen, et al.

Serial No.: 08/319,411

Group No.: Not yet assigned.

Filed: October 6, 1994

Examiner: Not yet assigned.

For: Peptide Nucleic Acid Conjugates

Commissioner of Patents & Trademarks
Washington, DC 20231

Sir:

ASSOCIATE POWER OF ATTORNEY

The undersigned, John W. Caldwell, Registration No. 28,937, of the firm WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania 19103, Attorney and/or Agent for Applicant(s), hereby appoints the following:

Robert B. Washburn	Registration No. 16,574
Richard E. Kurtz	Registration No. 19,263
John J. Mackiewicz	Registration No. 19,709
Norman L. Norris	Registration No. 24,196
Albert W. Preston, Jr.	Registration No. 25,366
Dale M. Heist	Registration No. 28,425
Philip S. Johnson	Registration No. 27,200
Gary H. Levin	Registration No. 28,734
Steven J. Rocci	Registration No. 30,489
Dianne B. Elderkin	Registration No. 28,598
Francis A. Paintin	Registration No. 19,386
John P. Donohue, Jr.	Registration No. 29,916
Henrik D. Parker	Registration No. 31,863

Suzanne E. Miller	Registration No. 32,279
Lynn B. Morreale	Registration No. 32,842
Albert T. Keyack	Registration No. 32,906
Joseph Lucci	Registration No. 33,307
Michael P. Dunnam	Registration No. 32,611
Michael D. Stein	Registration No. 34,734
Albert J. Marcellino	Registration No. 34,664
David R. Bailey	Registration No. 35,057
Rebecca L. Ralph	Registration No. 35,152
John L. Knoble	Registration No. 32,387
Michele K. Herman	Registration No. 35,893
Barbara L. Mullin	Registration No. 38,250
Ken I. Yoshida	Registration No. 37,009
Mark DeLuca	Registration No. 33,229
Steven B. Samuels	Registration No. 37,711
Lynn A. Malinoski	Registration No. P38,788
Lori Y. Beardell	Registration No. 34,293
Frederick A. Tecce	Registration No. 32,065
Raymond M. Speer	Registration No. 26,810
Doreen Yatko Trujillo	Registration No. 35,719
Kathryn Leary	Registration No. 36,317
Michael P. Straher	Registration No. 38,325
Merle W. Richman, III	Registration No. 38,282
Paul K. Legaard	Registration No. 38,534
Kevin M. Flannery	Registration No. 35,871
David A. Cherry	Registration No. 35,099
Anthony J. Rossi	Registration No. 24,053
D. Jennings Meincke	Registration No. 36,606

and

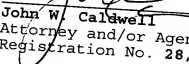
Herb Boswell	Registration No. 27,311
Laurel Bernstein	Registration No. 37,280

of **ISIS PHARMACEUTICALS**, 2280 Faraday Avenue, Carlsbad, California 92008; his associates, with full power to prosecute the above-identified application and to transact all business in the Patent Office connected therewith and requests that

correspondence continue to be directed to the firm of WOODCOCK
WASHBURN KURTZ MACKIEWICZ & NORRIS at the above address.

Date: April 10, 1995

WOODCOCK WASHBURN KURTZ
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One Liberty Place - 46th Floor
Philadelphia, PA 19103
(215) 568-3100


John W. Caldwell
Attorney and/or Agent of Record
Registration No. 28,937

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

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I verily believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **Peptide Nucleic Acid Conjugates**, the specification of which:

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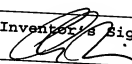
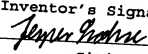
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Philadelphia, PA 19103
Telephone No. 215-568-3100.

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United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

1	Full Name <u>Peter Nielsen</u>	Inventor's Signature 	Date 6/1-95
	Residence DK 2980 <u>Kokkedal</u> , Denmark <u>DKX</u>		
	Citizenship Citizen of Denmark		
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3	Full Name <u>Soren Holst Sonnechsen</u>	Inventor's Signature <u>Soren Holst Sonnechsen</u>	Date 6/1/1995
	Residence DK 2630 <u>Tastrup</u> , Denmark <u>DKX</u>		
	Citizenship Citizen of Denmark		
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4	Full Name <u>Jesper Lohse</u>	Inventor's Signature 	Date 6/1/1995
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	Post Office Address <u>Staerevej 52, 2.tv,</u>		
5	Full Name <u>Michael Egholm</u>	Inventor's Signature	Date
	Residence <u>Lexington, MA 02173</u>		
	Citizenship Citizen of Denmark		
	Post Office Address <u>1231 Lexington Ridge Drive</u>		

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680	Full Name <u>Muthiah Manoharan</u>	Inventor's Signature <u>Muthiah Manoharan</u>	Date <u>1/20/95</u>
6	Residence <u>Carlsbad, CA 92009 CA</u>		
	Post Office Address <u>7634 Reposado Drive</u>		
780	Full Name <u>John Kiely</u>	Inventor's Signature <u>John Kiely</u>	Date <u>1/16/95</u>
7	Residence <u>San Diego, CA 92130 CA</u>		
	Post Office Address <u>4230 Corte Facil</u>		
800	Full Name <u>Michael Griffith</u>	Inventor's Signature <u>Michael Griffith</u>	Date <u>1/20/95</u>
8	Residence <u>San Diego, CA 92130 CA</u>		
	Post Office Address <u>3686 Carmel Landing</u>		
900	Full Name <u>K lly Sprankle</u>	Inventor's Signature <u>Kelly Sprankle</u>	Date <u>1/20/95</u>
9	Residence <u>Vista, CA 92083 CA</u>		
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10	Full Name 	Inventor's Signature 	Date
	Residence 		
	Post Office Address 		

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5	Full Name Michael Egholm <i>5-0</i>	Inventor's Signature <i>Michael Egholm</i>	Date 4/10/95
	Residence Lexington, MA 02173 <i>ML</i>		Citizenship Citizen of Denmark
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(XX) was filed on October 6, 1994, as Application Serial No. 08/319,411.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to the patentability of this application in accordance with 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of any application on which priority is claimed:

Country	Number	Date Filed	Priority Claimed
<u>PCT</u>	<u>EP/01219</u>	<u>May 22, 1992</u>	<u>Yes.</u>
<u>Denmark</u>	<u>986/91</u>	<u>May 24, 1991</u>	<u>Yes.</u>
<u>Denmark</u>	<u>987/91</u>	<u>May 24, 1991</u>	<u>Yes.</u>
<u>Denmark</u>	<u>510/92</u>	<u>April 15, 1992</u>	<u>Yes.</u>

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (patented, pending)
<u>08/108,591</u>	<u>August 27, 1993</u>	<u>pending</u>
<u>08/088,658</u>	<u>July 2, 1993</u>	<u>pending</u>
<u>08/088,661</u>	<u>July 2, 1993</u>	<u>pending</u>
<u>08/275,951</u>	<u>July 15, 1994</u>	<u>pending</u>

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: John W. Caldwell, Esquire Registration No. 28,937 of the firm of WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania 19103, and Herb Boswell and Laurel Bernstein, Registration Nos. 27,311 and 37,280, of ISIS Pharmaceuticals, 2280 Faraday Avenue, Carlsbad, California 92008.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the

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